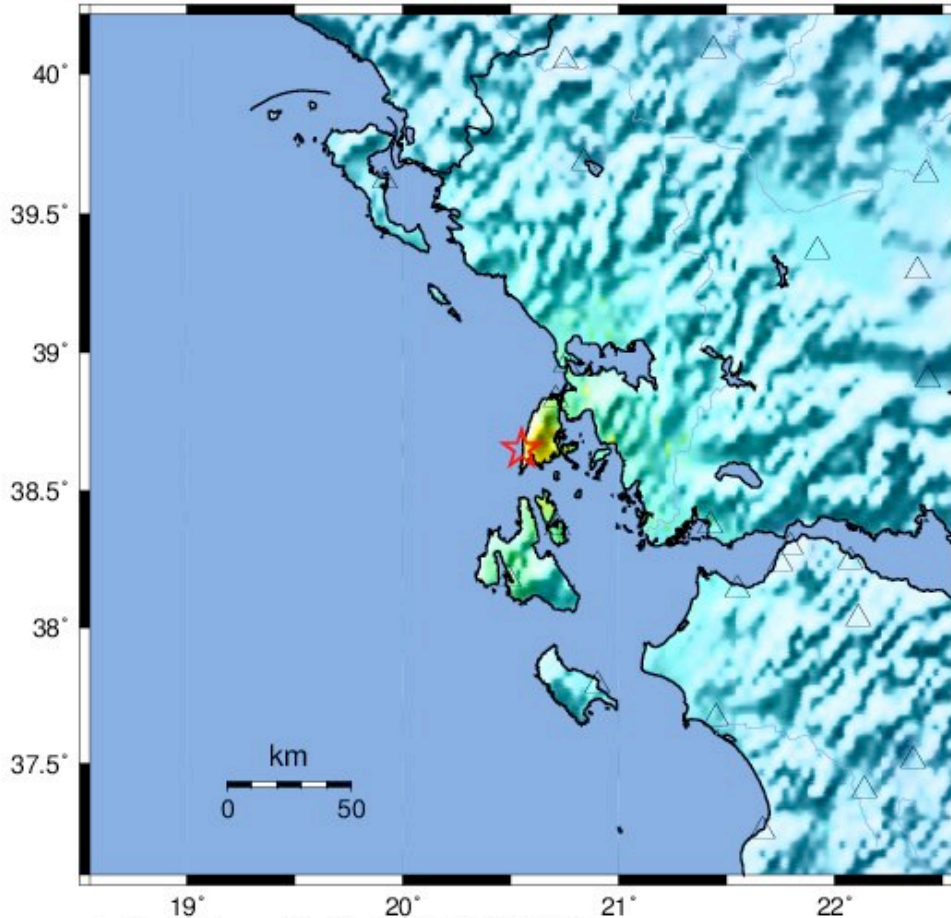


# EPPO ShakeMap : Greece

NOV 17 2015 07:10:07 AM GMT M 5.8 N38.65 E20.55 Depth: 5.0km ID:auth2015wrmvj



Map Version 1 Processed Tue Nov 17, 2015 07:26:25 AM GMT

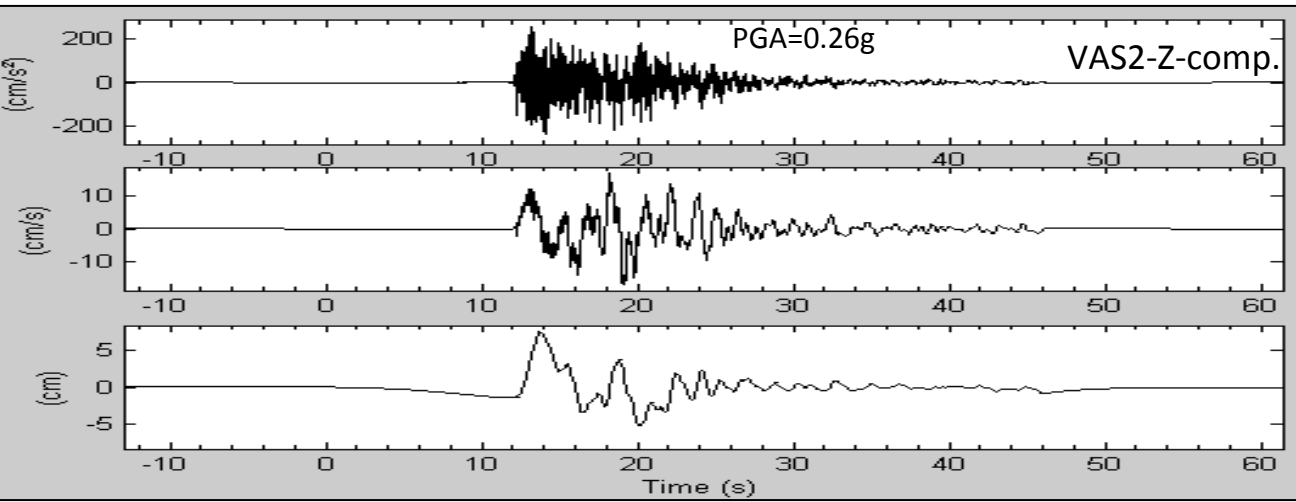
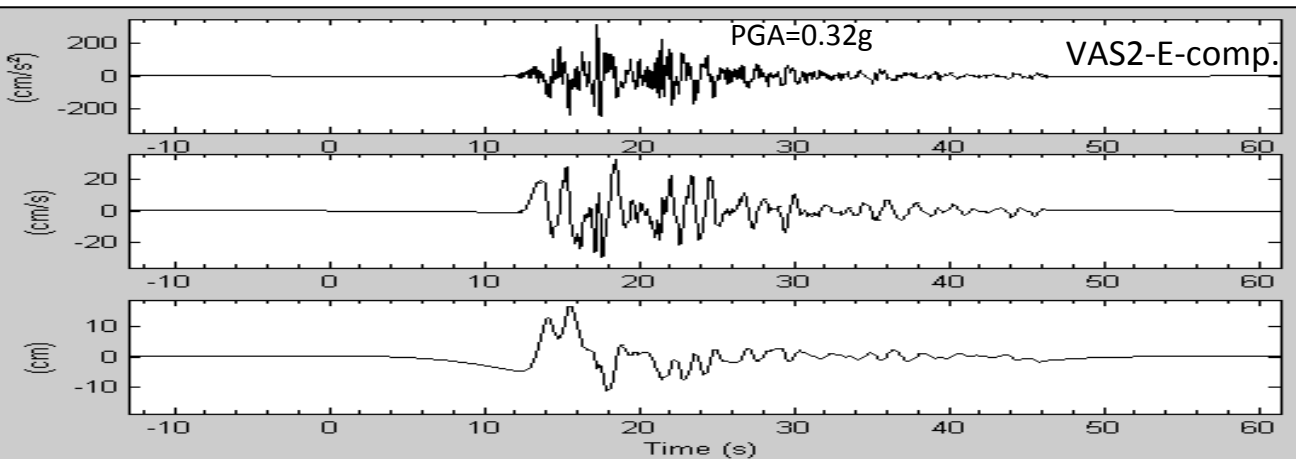
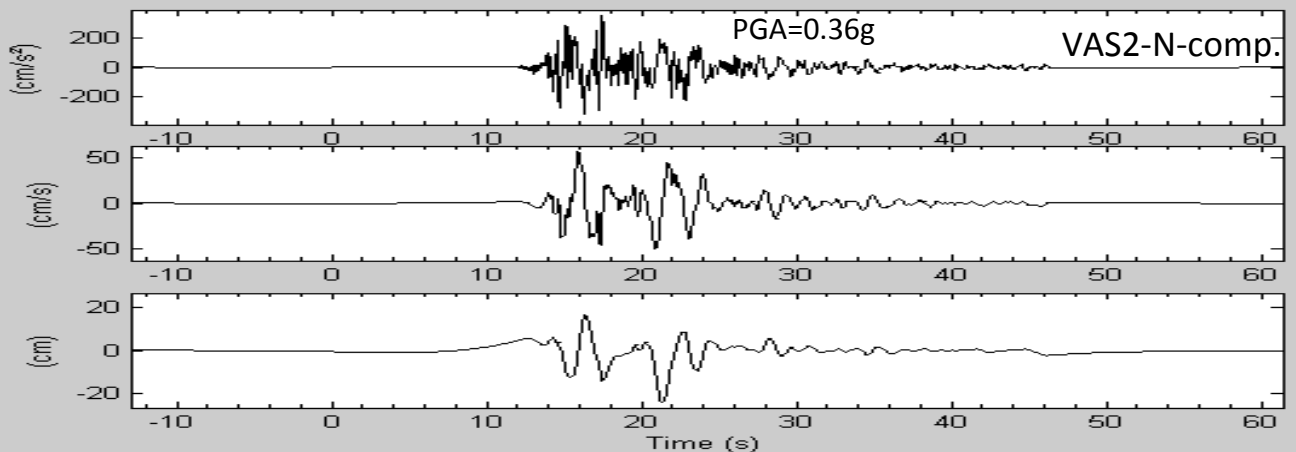
PERCEIVED SHAKING	Not felt	Weak	Light	Moderate	Strong	Very strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	none	none	none	Very light	Light	Moderate	Mod./Heavy	Heavy	Very Heavy
PEAK ACC. (%g)	<0.05	0.3	2.8	6.2	12	22	40	75	>139
PEAK VEL. (cm/s)	<0.02	0.1	1.4	4.7	9.6	20	41	86	>178
INSTRUMENTAL INTENSITY	I	II-III	IV	V	VI	VII	VIII	IX	X+

Scale based upon Worden et al. (2011)

## Lefkas earthquake (M6.0) of Nov. 17, 2015, 07:10GMT

SHAKEMAPS generated in less than 10min after the origin time of the event.

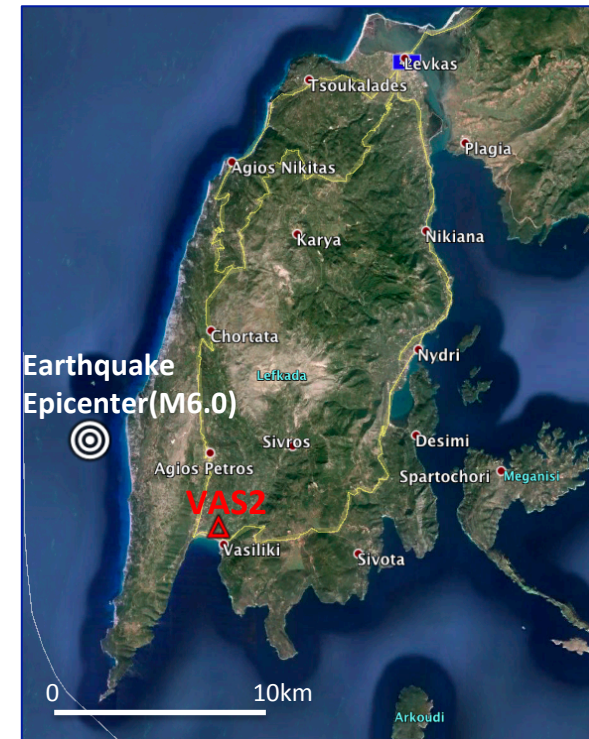
The strongly affected area of southwestern Lefkas island (Greece) is clearly shown by the shakemap.



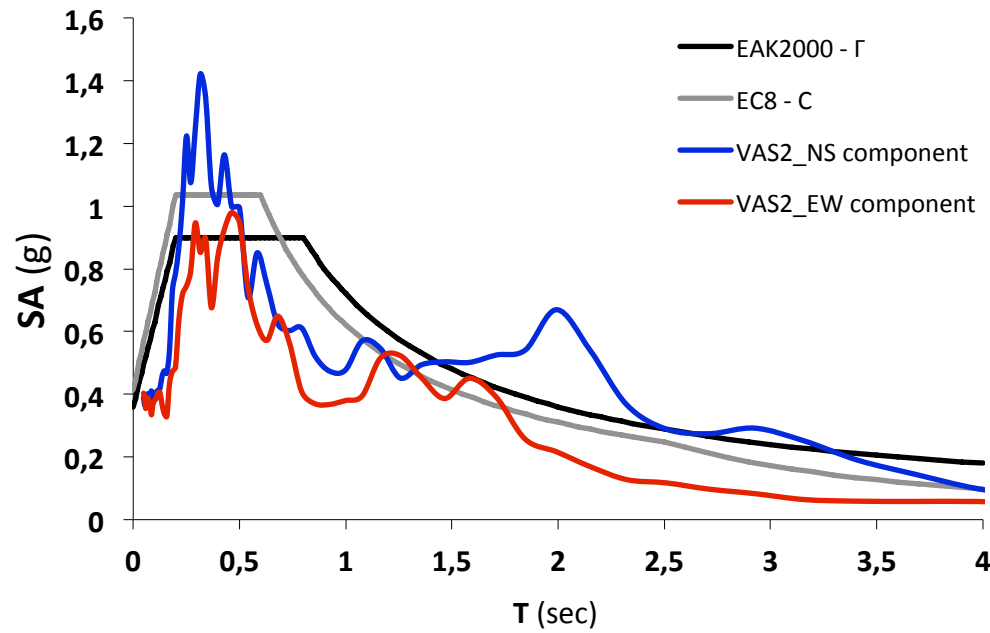
## Lefkas earthquake (M6.0) of Nov. 17, 2015, 07:10GMT

**Accelerograph Station  
of Vassiliki (VAS2) and  
recorded time histories**  
[acceleration, velocity displacement]

Epicentral Distance Rep≈8km

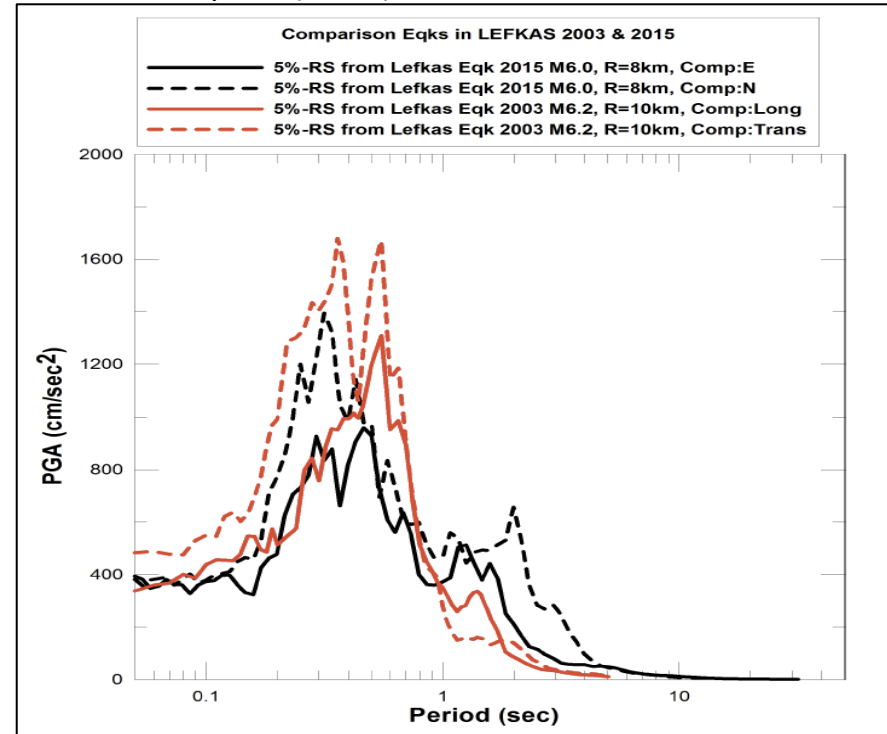


## Lefkas earthquake (M6.0) of Nov. 17, 2015, 07:10GMT



Acceleration response spectra( $D=0.05$ ) of the VAS2 recording of the Nov. 17, 2015 earthquake, in comparison with EAK2000 and EC8 elastic design spectra.

Acceleration response spectra( $D=0.05$ ) of the VAS2 recording (black lines), in comparison with those of the Lefkas (LEF1: red lines) of the Aug. 14, 2003 earthquake(M6.2).



## Building Typology of Lefkas Town

CATEGORY	DESCRIPTION	REMARKS
<b>A</b>	One- or two story stone masonry buildings	Buildings more than 50 years old, with load bearing system of stone masonry. They incorporate some empirical lateral load bearing systems, which are in general insufficient. Masonry consists of stones with weak lime (and rarely cement or clay) mortar.
<b>B</b>	Buildings of special typology with dual structural system.	It is a traditional structural typology met mainly in the old town district of Lefkas. The main load bearing system consists of stone masonry on the ground level, complemented by a secondary (redundant) wood structural frame, designed to be activated only in case the masonry fails (e.g. during an earthquake). On the upper floors the load bearing system consists of wood frames with brick infill. Mostly two-story (and in some cases three-story) buildings. The dual bearing system, combined with the relatively low-mass of the upper stories exhibits a remarkably reduced vulnerability to earthquake actions. Due to poor soil conditions (and a high underground water level), the masonry walls are founded either on extended footings made up of horizontally placed tree trunks or on vertical wood piles.
<b>C</b>	Modern R/C buildings with one to five stories	The majority of houses, office and hotel buildings, up to five stories high (in the town of Lefkas). Load bearing system with cast-in-place reinforced concrete. Walls with hollow bricks used as infills. Various types of foundations, ranging from spread footings to mat foundations. Due to poor soil conditions, concrete piles used in many foundations.
<b>D</b>	Middle-age and later-era monuments	Buildings of architectural heritage, with no special seismic provisions. Mostly churches and some castles along the entrance from the mainland to the island

**Instrumented building in Lefkas town**

